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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,921

Applicant(s)

HOSOTANI ET AL.

Examiner

PETER L. CHENG

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments have been considered but are moot in view of the new grounds of rejection necessitated by the amended claims.

Specification

2. The disclosure is objected to because of the following informalities; please note that page and line numbers refer to the originally filed disclosure:
 - There are some typographical and grammatical errors in the disclosure; **page 2, line 5** (replace "is to be needed" with "is needed"); **page 2, line 14** (insert "an" between "that" and "erroneous"); **page 14, line 18** (insert "a" between "with" and "configuration"); **page 16, line 14** (replace "an model name" with "a model name"); **page 18, line 6** (replace "a cold reserving storage" with the more common term "refrigerator", as noted on page 11, line 8); **page 19, line 8** (replace "an model name" with "a model name"); **page 26, line 13** (insert "an" before the first "editing"); **page 26, line 22** (replace "an model name" with "a model name"); **page 27, lines 22 – 23** (suggest replacing "set to the first printer 2" with "set to a first printer 2"); **page 27, lines 23 – 24** (suggest

- replacing "set to the next printer 2" with "set to a second printer 2"); **page 27, lines 24 – 25** (suggest replacing "set to the *further next* printer 2" with "set to a third printer 2"); **page 28, line 7** (replace "an model name" with "a model name"); **page 30, line 7** (replace "a erroneous" with "an erroneous"); **page 30, line 25** (replace "may case" with "may cause"); **page 31, line 8** (replace "fourthe" with "fourth"); **page 32, line 23** and **page 35, line 19** (suggest changing "the erroneous operation" to "an erroneous operation"); **page 33, line 13** and **page 36, line 8** (suggest "if a configuring error occurs" instead of "when the configuring error happens to occur"); **page 33, line 14** and **page 36, line 10** (suggest "determine" or similar word instead of "find out");
- **Page 14, line 17:** reference number 15 is associated with a "ROM" (*read-only* memory); however, on **page 14, line 6**, reference number 15 is associated with a "storage unit" *such as a hard disk drive*; since these are different devices, for clarity, suggest removing reference number 15 after the word "ROM";
 - **Page 14, line 19:** for clarity, suggest adding reference number "151" after "file"; that is, "information storage file 151 which stores ...";
 - **Page 18, line 18:** for clarity, suggest replacing **machine sort file 252** with **model information file 252**;

- **Page 26, line 17:** for clarity, suggest replacing a **column for entering model information** with **an area for entering model information**;
- **Page 26, line 18:** for clarity, suggest replacing **another column for entering a configuring item** with **another area for entering a configuring item**;

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities:
 - **Line 2:** the amended claim of *configuring a plurality of devices of various kinds by a second device* does not appear supported by the original disclosure; it is assumed that Applicant intended to cite **configuring a plurality of devices of various kinds, including a second device, by an information processing apparatus** instead of **configuring a plurality of devices of various kinds by a second device and an information processing apparatus**;
4. Claim 2 is objected to because of the following informalities:

- **Line 3:** it is assumed that applicant intended to cite **which is** instead of **in which**;
5. Claim 4 is objected to because of the following informalities:
- **Lines 2 - 3: claim 2, lines 8 – 9** refers to an “acquired configuration information” and **claim 2, lines 10 – 12** refers to a “stored configuration information”; for clarity, suggest replacing **the configuration information** with **the stored configuration information of the first device**;
 - **Line 7:** for clarity, suggest replacing **the configuration information** with **configuration information**;
6. Claim 5 is objected to because of the following informalities:
- **Lines 1 - 2: claim 2, line 7** refers to “identification information specific to the first device” and **claim 2, line 15** refers to “identification information specific to the second device”; it is assumed that **the identification** refers to both; for clarity, suggest replacing **the identification** with **the identification information specific to the first device and the identification information specific to the second device each**;
7. Claim 6 is objected to because of the following informalities:

- **Line 3:** it is assumed that applicant intended to cite **which is** instead of **in which**;
- **Line 22:** it is assumed that applicant intended to cite **where it is determined** instead of **where determined**;
- **Line 23:** it is assumed that applicant intended to cite **coincide with each** instead of **coincide each**;

8. Claim 7 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 2. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1, 2, 3, 4, 6, 7 and 8 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **GOFFINET [US Patent 5,905,906]** in view of **HANSEN [US Patent Application 2003/0090704 A1]**.

As for claim 1, GOFFINET teaches a device configuring method for configuring a plurality of devices of various kinds by a second device [e.g., printer **16a** shown in **Fig. 1**] and an information processing apparatus [**Fig. 1**, host computer **12**] in which is connected to the devices via a communication network [**Fig. 1** LAN **15**], the method comprising:

acquiring from a first device

[Fig. 1 printer 13]

both model information of the first device and identification information specific to the first device by the information processing apparatus

[GOFFINET teaches a method by which a host computer (**Fig. 1** host computer **12**) may “save the configuration information of a particular printer (e.g., *printer 13*”); **col. 6, lines 47 - 48**. This is illustrated in **Fig. 4** as the “Quick Setup Save” procedure.

Within the printer controller (**Fig. 3**), the “Options Manager 37 is designed to be able to easily retrieve and store all such configuration variables for its particular model laser printer”; **col. 7, lines 5 – 7**.

Shown in **Fig. 4**, steps **102** (Determine I.D. of Next OM Variable to be Read) through **110** (At End of OM Table?), the Options Manager reads each OM variable shown in **Table #1** and transmits the corresponding value to the host computer where it is stored in a file.

From **Table #1**, the host computer acquires “model information” of a first device (e.g., OMMODELNAME, the model name) and “identification information” (e.g., OMSERIALNUM, the serial number);

other related “model information” could be obtained from Table #1 as well; for example, some “higher-end” models may have 3 paper input trays whereas, some “lower-end” models may just have one];

acquiring from the first device configuration information of the first device by the information processing apparatus

[Contained within **Table #1** are various configuration variables (i.e., "OM variables"); among these are, for example, **OMEMULATION** (default emulation), **OMPAPERSRC** (default paper source), **OMOUTPUTCAP** (output drawer capacity), and **OMINPUTCAP** (input tray1 capacity)];

storing the acquired configuration information in a status correlated with both the model information and the identification information of the first device

[**Fig. 4** "depicts a flow chart of the steps that the host computer (e.g., a host 12) must undergo to create a file at its own storage media (e.g., upon its own hard disk drive) so as to save the configuration information of a particular printer"; **col. 6, lines 44 – 47**; the storing of the acquired configuration information occurs in **Fig. 4 step 112** (close file in which printer settings are stored)];

acquiring one or more data packets from a the second device, the one or more data packets containing both model information of the second device and identification information specific to the second device by the information processing apparatus,

the acquiring from the second device occurring automatically in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on;

automatically causing, in response to the acquiring from the second device, the information processing apparatus or the second device to determine whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

transmitting, when determined that the model information of the first device and the model information of the second device coincide with each other, the stored configuration information of the first device from the information processing apparatus to the second device

[GOFFINET teaches that “under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the “first device”] be utilized on other printers [i.e., the “second device”] having the identical model number”; col. 15, lines 6 – 9.

Fig. 6 illustrates the “Quick Setup Send” host computer procedure. Once a configuration setup file has been selected (**step 140**), a selection is made as to which printers will be configured (**step 142**). **Steps 144** through **152** retrieve

configuration values stored in the saved setup file and transmit each value (along with its corresponding variable identification) to a second device (i.e., a selected printer); specifically, the data packet for a "Set OM Variable" command has a format shown in **col. 15, line 29**;

and configuring the second device in accordance with the transmitted configuration information

[Fig. 7 illustrates the "Set OM Variable" printer procedure. After the second device (i.e., a selected printer) receives the packet sent from the host computer, the printer controller's Options Manager reads the value of the OM variable (from the data packet) and stores it into memory; **col. 16, lines 32 – 35**.

"Configuring the second device" is achieved by storing the new OM variable values into memory].

However, GOFFINET *does not specifically teach*

acquiring one or more data packets from a the second device, the one or more data packets containing both model information of the second device and identification information specific to the second device by the information processing apparatus

the acquiring from the second device occurring automatically in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on;

automatically causing, in response to the acquiring from the second device, the information processing apparatus or the second device to determine whether or not the model information of the first device and the model information of the second device **in the one or more data packets** coincide with each other

GOFFINET teaches that once the model, identification and configuration information are acquired from the first device and are stored in a file (**Fig. 4 step 112**), "the file on the hard drive can be accessed and its contents sent to other printers on the LAN 15, thereby configuring such other printers very quickly and easily"; **col. 15, lines 3 – 6.**

As noted, GOFFINET teaches that "under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the "first device"] be utilized on other printers [i.e., the "second device"] having the identical model number"; **col. 15, lines 6 – 9.**

GOFFINET teaches that a host computer can acquire both model information (e.g., OMMODELNAME) and identification information (e.g., OMSERIALNUM) by requesting a device to return the value associated with an "OM variable".

GOFFINET further teaches that such information is communicated to the host computer in one or more packets. With reference to **Fig. 5**, GOFFINET cites, "Once the variable value has been determined, function block 130 will *build a packet that is to be transmitted back to the host 12*"; **col. 13, lines 65 – 67**.

That is, it would have been obvious to one of ordinary skill in the art at the time the invention was made to acquire both *model information* and *identification information* from a "second device" [e.g., printer **16a** shown in **Fig. 1**] in the same manner (using OM variables) as with the "first device" (i.e., printer **13**).

However, GOFFINET does not teach automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information *when the second device is connected to the information processing apparatus and is turned on*.

HANSEN teaches a method of automatically configuring a printing device. With reference to **Figs. 1 and 4**, HANSEN illustrates the automatic configuration of printing device **102** in which "the configuration process can be initiated by the printing device

configuration module 316 of a computing device 108"; **page 3, paragraph 32, lines 3 – 6**. Although, the "printing device configuration module" **316** can be manually activated by "identifying the presence of a newly added printing device 102" [**page 3, paragraph 32, lines 8 - 11**], *in a manner similar as taught by GOFFINET*, HANSEN teaches that *the presence of a new printing device 102 "can be automatically detected* by the printing device configuration module 316" [**page 3, paragraph 33, lines 1 – 3**] by periodically sending "response requests" to every device that is connected to module **316** [**page 3, paragraph 33, lines 4 - 6**]. *Alternatively, the "newly added printing device 102 can be configured to send out periodic notifications that identify its presence to other devices on the network 114, including the computing device 108"*; **page 3, paragraph 33, lines 11 – 15**.

That is, HANSEN teaches a method by which a newly added printing device (i.e., a "second device") automatically identifies its presence to the "printing device configuration module" **316** of a "computing device" **108** (i.e., an "information processing apparatus") *when the newly added device is connected to the information processing apparatus and is turned on*.

In response to this automatic identification, with reference to Fig. 4, HANSEN teaches that the "configuration module 316 can automatically determine what type of device the printing device 102 is, as indicated in block 404. In terms of type, the module 316 can, for instance, determine whether the device is a printing device, the manufacturer of the

printing device, the device model number, etc"; **page 3, paragraph 34, lines 4 – 9.**

"Alternatively, the information can be obtained by querying the printing device 102 and receiving an appropriate response"; **page 3, paragraph 34, lines 12 – 14.**

That is, HANSEN teaches automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information when the second device is connected to the information processing apparatus and is turned on.

In addition, GOFFINET does not teach automatically causing a determination by either the information processing apparatus or the second device of whether the model information of the first device coincides with the model information of the second device.

HANSEN teaches that once the "printing device configuration module" **316** has acquired information relating to the type of device (e.g., manufacturer, device model number, etc.), module **316** "can determine what configuration applet 318 is to be downloaded to the printing device 102"; **page 3, paragraph 35, lines 1 – 3.**

That is, HANSEN teaches automatically causing a determination by the information processing apparatus of whether the model information of the second device coincides with the model information of a known, recognized device. HANSEN teaches that "the type of applet 318 downloaded to the printing device 102 may be device dependent

where the nature of the configuration of the device depends upon the device's architecture"; **page 3, paragraph 35, lines 9 – 12.**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of HANSEN with those of GOFFINET so that the information processing apparatus could automatically configure the second device by *automatically detecting the presence* of the newly added second device, *automatically querying* the newly added second device for both model and identification information and *automatically determining* whether the newly added second device matched a known, recognized device (e.g., the first device).

The benefits of such automatic configuration would include both a reduction in configuration time and the elimination of potential errors that could be incurred by manually configuring a second device.

Regarding claim 2, GOFFINET teaches a device configuring system comprising:

a plurality of devices of various kinds including a second device

[GOFFINET teaches "each of the printers 13, 16a, 16b, 16c, and 16d may be of the same type or of different models"; **col. 3, lines 57 – 59.**

For the purpose of claim interpretation, printer 16a shown in Fig. 1 corresponds to the "second device";

and an information processing apparatus [Fig. 1, host computer 12] in which [which is] connected to the devices via a communication network [Fig. 1 LAN 15],

wherein the information processing apparatus comprises:

a first acquiring unit configured to acquire from a first device [Fig. 1 printer 13] both model information of the first device and identification information specific to the first device

[GOFFINET teaches a method by which a host computer (Fig. 1 host computer 12) may "save the configuration information of a particular printer (e.g., printer 13)"; col. 6, lines 47 - 48. This is illustrated in Fig. 4 as the "Quick Setup Save" procedure.

Within the printer controller (Fig. 3), the "Options Manager 37 is designed to be able to easily retrieve and store all such configuration variables for its particular model laser printer"; col. 7, lines 5 – 7.

Shown in Fig. 4, steps 102 (Determine I.D. of Next OM Variable to be Read) through 110 (At End of OM Table?), the Options Manager reads each OM variable shown in Table #1 and transmits the corresponding value to the host computer where it is stored in a file.

From **Table #1**, the host computer acquires “model information” of a first device (e.g., OMMODELNAME, the model name) and “identification information” (e.g., OMSERIALNUM, the serial number);

other related “model information” could be obtained from Table #1 as well; for example, some “higher-end” models may have 3 paper input trays whereas, some “lower-end” models may just have one];

a configuration information acquiring unit configured to acquire from the first device configuration information of the first device

[Contained within **Table #1** are various configuration variables (i.e., “OM variables”); among these are, for example, **OMEMULATION** (default emulation), **OMPAPERSRC** (default paper source), **OMOUTPUTCAP** (output drawer capacity), and **OMINPUTCAP** (input tray1 capacity)];

a storing unit configured to store the acquired configuration information in a status correlated with both the model information and the identification information of the first device

[**Fig. 4** “depicts a flow chart of the steps that the host computer (e.g., a host 12) must undergo to create a file at its own storage media (e.g., upon its own hard disk drive) so as to save the configuration information of a particular printer”; **col.**

6, lines 44 – 47; the storing of the acquired configuration information occurs in Fig. 4 step 112 (close file in which printer settings are stored)];

a second acquiring unit configured to acquire one or more data packets from a the second device, the one or more data packets containing both model information of the second device and identification information specific to the second device;

a determining unit configured to determine, in automatic response to the acquiring from the second device, whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

and a transmitting unit configured to transmit, when determined that the model information of the first device and the model information of the second device coincide with each other, the stored configuration information of the first device to the second device

[GOFFINET teaches that “under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the “first device”] be utilized on other printers [i.e., the “second device”] having the identical model number”; col. 15, lines 6 – 9.

Fig. 6 illustrates the “Quick Setup Send” host computer procedure. Once a configuration setup file has been selected (**step 140**), a selection is made as to which printers will be configured (**step 142**). **Steps 144** through **152** retrieve configuration values stored in the saved setup file and transmit each value (along with its corresponding variable identification) to a second device (i.e., a selected printer); specifically, the data packet for a “Set OM Variable” command has a format shown in **col. 15, line 29**],

the second device comprising a transmitting unit configured to automatically transmit the model information of the second device and identification information specific to the second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on,

wherein the second device comprises a configuring unit configured to perform a configuration thereof in accordance with the transmitted configuration information

[**Fig. 7** illustrates the “Set OM Variable” printer procedure. After the second device (i.e., a selected printer) receives the packet sent from the host computer, the printer controller’s Options Manager reads the value of the OM variable (from the data packet) and stores it into memory; **col. 16, lines 32 – 35.**

"Configuring the second device" is achieved by storing the new OM variable values into memory].

However, GOFFINET *does not specifically teach*

a second acquiring unit configured to acquire one or more data packets from a the second device, the one or more data packets containing both model information of the second device and identification information specific to the second device;

a determining unit configured to determine, in automatic response to the acquiring from the second device, whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

the second device comprising a transmitting unit configured to automatically transmit the model information of the second device and identification information specific to the second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on,

GOFFINET teaches that once the model, identification and configuration information are acquired from the first device and are stored in a file (**Fig. 4 step 112**), "the file on the

hard drive can be accessed and its contents sent to other printers on the LAN 15, thereby configuring such other printers very quickly and easily”; **col. 15, lines 3 – 6.**

As noted, GOFFINET teaches that “under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the “first device”] be utilized on other printers [i.e., the “second device”] having the identical model number”; **col. 15, lines 6 – 9.**

GOFFINET teaches that a host computer can acquire both model information (e.g., OMMODELNAME) and identification information (e.g., OMSERIALNUM) by requesting a device to return the value associated with an “OM variable”.

GOFFINET further teaches that such information is communicated to the host computer in one or more packets. With reference to **Fig. 5**, GOFFINET cites, “Once the variable value has been determined, function block 130 will *build a packet that is to be transmitted back to the host 12*”; **col. 13, lines 65 – 67.**

That is, it would have been obvious to one of ordinary skill in the art at the time the invention was made to acquire both *model information* and *identification information* from a “second device” [e.g., printer **16a** shown in **Fig. 1**] in the same manner (using OM variables) as with the “first device” (i.e., printer **13**).

However, GOFFINET does not teach automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information when the second device is connected to the information processing apparatus and is turned on.

HANSEN teaches a method of automatically configuring a printing device. With reference to **Figs. 1 and 4**, HANSEN illustrates the automatic configuration of printing device **102** in which "the configuration process can be initiated by the printing device configuration module 316 of a computing device 108"; **page 3, paragraph 32, lines 3 – 6**. Although, the "printing device configuration module" **316** can be manually activated by "identifying the presence of a newly added printing device 102" [**page 3, paragraph 32, lines 8 - 11**], *in a manner similar as taught by GOFFINET*, HANSEN teaches that *the presence of a new printing device 102 "can be automatically detected by the printing device configuration module 316"* [**page 3, paragraph 33, lines 1 – 3**] by periodically sending "response requests" to every device that is connected to module **316** [**page 3, paragraph 33, lines 4 - 6**]. *Alternatively, the "newly added printing device 102 can be configured to send out periodic notifications that identify its presence to other devices on the network 114, including the computing device 108"*; **page 3, paragraph 33, lines 11 – 15**.

That is, HANSEN teaches a method by which a newly added printing device (i.e., a "second device") automatically identifies its presence to the "printing device

configuration module" **316** of a "computing device" **108** (i.e., an "information processing apparatus") *when the newly added device is connected to the information processing apparatus and is turned on.*

*In response to this automatic identification, with reference to **Fig. 4**, HANSEN teaches that the "configuration module 316 can automatically determine what type of device the printing device 102 is, as indicated in block 404. In terms of type, the module 316 can, for instance, determine whether the device is a printing device, the manufacturer of the printing device, the device model number, etc"; page 3, paragraph 34, lines 4 – 9.*

"Alternatively, the information can be obtained by querying the printing device 102 and receiving an appropriate response"; page 3, paragraph 34, lines 12 – 14.

That is, HANSEN teaches automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information when the second device is connected to the information processing apparatus and is turned on.

In addition, GOFFINET does not teach automatically causing a determination by either the information processing apparatus or the second device of whether the model information of the first device coincides with the model information of the second device.

HANSEN teaches that once the "printing device configuration module" **316** has acquired information relating to the type of device (e.g., manufacturer, device model number, etc.), module **316** "can determine what configuration applet 318 is to be downloaded to the printing device 102"; **page 3, paragraph 35, lines 1 – 3.**

That is, HANSEN teaches automatically causing a determination by the information processing apparatus of whether the model information of the second device coincides with the model information of a known, recognized device. HANSEN teaches that "the type of applet 318 downloaded to the printing device 102 may be device dependent where the nature of the configuration of the device depends upon the device's architecture"; **page 3, paragraph 35, lines 9 – 12.**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of HANSEN with those of GOFFINET so that the information processing apparatus could automatically configure the second device by *automatically detecting the presence* of the newly added second device, *automatically querying* the newly added second device for both model and identification information and *automatically determining* whether the newly added second device matched a known, recognized device (e.g., the first device).

The benefits of such automatic configuration would include both a reduction in configuration time and the elimination of potential errors that could be incurred by manually configuring a second device.

Regarding claim 3, GOFFINET further teaches the device configuring system as claimed in claim 2,

wherein the second device further comprises a completion information transmitting unit configured to transmit, after the configuration is completed, completion information that indicates the completion of the configuration to the information processing apparatus

[After the OM configuration variable's value has been set in the second device (i.e., a selected printer; see **Fig. 7, step 168**), a "success" printer response may be sent back to the host computer;

alternatively, a "failure response will be transmitted if the data size checking failed, or if the [oid1] and [oid2] NPA identification was not acceptable by this particular laser printer"; **col. 16, lines 62 – 65**; in the latter case, an NPA identification may be deemed not acceptable if it is "instructed to change an attribute for a feature not installed on the printer (e.g., if paper tray 3 is being set to size A4 paper, and a third paper tray is not installed ...), it will ignore this Set OM Variable command"; **col. 15, lines 35 - 39**].

Regarding claim 4, GOFFINET further teaches the device configuring system as claimed in claim 2,

wherein the information processing apparatus further comprises an editing unit configured to edit the configuration information

[GOFFINET teaches, "a laser printer should have the capability of having its configuration information contents uploaded into a host computer, so that the host computer can store that same configuration information upon its own storage media, such as in a file residing on a hard disk drive. Once a file is created at the host computer, it will be understood that the contents of such file can either be directly downloaded to the other laser printers on the network, or that the file's contents could be manipulated so that individual operating characteristics of a laser printer can be modified by a Network Administrator"; col. 6, lines 33 – 42],

wherein the storing unit is further configured to store the edited configuration information

[As noted above, the stored configuration file's contents can be "manipulated so that individual operating characteristics of a laser printer can be modified by a Network Administrator, and that the file is stored in a storage media (e.g., a hard disk drive)],

and wherein the transmitting unit is configured to transmit the edited configuration information as the configuration information to the second device

[As noted above, the configuration file can be either *directly downloaded* (i.e., without modification) to other printers on the network, or first modified and then sent to other printers on the network].

Regarding claim 6, GOFFINET teaches a device configuring system comprising:

a plurality of devices of various kinds

[GOFFINET teaches "each of the printers 13, 16a, 16b, 16c, and 16d may be of the same type or of different models"; **col. 3, lines 57 - 59**];

and an information processing apparatus [Fig. 1, host computer 12] in which [which is] connected to the devices via a communication network [Fig. 1 LAN 15],

wherein the information processing apparatus comprises:

a first acquiring unit configured to acquire from a first device [Fig. 1 printer 13] model information of the first device

[GOFFINET teaches a method by which a host computer (Fig. 1 host computer 12) may "save the configuration information of a particular printer (e.g., printer

13)"; **col. 6, lines 47 - 48.** This is illustrated in **Fig. 4** as the "Quick Setup Save" procedure.

Within the printer controller (**Fig. 3**), the "Options Manager 37 is designed to be able to easily retrieve and store all such configuration variables for its particular model laser printer"; **col. 7, lines 5 – 7.**

Shown in **Fig. 4**, steps **102** (Determine I.D. of Next OM Variable to be Read) through **110** (At End of OM Table?), the Options Manager reads each OM variable shown in **Table #1** and transmits the corresponding value to the host computer where it is stored in a file.

From **Table #1**, the host computer acquires "model information" of a first device (e.g., OMMODELNAME, the model name) and "identification information" (e.g., OMSERIALNUM, the serial number);

other related "model information" could be obtained from Table #1 as well; for example, some "higher-end" models may have 3 paper input trays whereas, some "lower-end" models may just have one];

a configuration information acquiring unit configured to acquire from the first device configuration information of the first device

[Contained within **Table #1** are various configuration variables (i.e., “OM variables”); among these are, for example, **OMEMULATION** (default emulation), **OMPAPERSRC** (default paper source), **OMOUTPUTCAP** (output drawer capacity), and **OMINPUTCAP** (input tray1 capacity)];

a storing unit configured to store the acquired configuration information in a status correlated with the model information of the first device

[**Fig. 4** “depicts a flow chart of the steps that the host computer (e.g., a host 12) must undergo to create a file at its own storage media (e.g., upon its own hard disk drive) so as to save the configuration information of a particular printer”; **col. 6, lines 44 – 47**; the storing of the acquired configuration information occurs in **Fig. 4 step 112** (close file in which printer settings are stored)];

and a transmitting unit configured to automatically transmit one or more data packets, the data packets containing the stored configuration information of the first device together with the correlated model information to a second device

[GOFFINET teaches that “under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the “first device”] be utilized on other printers [i.e., the “second device”] having the identical model number”; **col. 15, lines 6 – 9.**

Fig. 6 illustrates the "Quick Setup Send" host computer procedure. Once a configuration setup file has been selected (**step 140**), a selection is made as to which printers will be configured (**step 142**). **Steps 144** through **152** retrieve configuration values stored in the saved setup file and transmit each value (along with its corresponding variable identification) to a second device (i.e., a selected printer); specifically, the data packet for a "Set OM Variable" command has a format shown in **col. 15, line 29]**

in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on,

wherein the second device [e.g., printer 16a shown in Fig. 1, or another printer similar to printer 13 shown in Fig. 1] comprises:

a determining unit configured to determine, in automatic response to receiving the transmitted model information, whether or not the transmitted model information of the first device coincides with a previously stored model information thereof

[Each printer stores its configuration variables in NVRAM; col. 13, lines 58 – 60;

GOFFINET teaches that each printer may store its configuration variables "in different physical memory locations" (**col. 7, lines 1 - 3**) but that it is the Options Manager's task to "easily retrieve and store all such configuration variables for its particular model laser printer"; **col. 7, lines 5 – 7**.

GOFFINET teaches that the second device (i.e., a selected printer) has a "determining unit" which "determines whether or not the data is an acceptable value and whether or not the data for a particular attribute (i.e., for an OM variable) corresponds to the options and configuration" of a printer; **col. 15, lines 32 – 35**.

"Model information" may be interpreted as the features and installed accessories of a particular device; in this case, a printer may have up to 3 input paper trays. However, "if a particular printer is instructed to change an attribute for a feature not installed on the printer (e.g., if paper tray 3 is being set to size A4 paper, and a third paper tray is not installed ...), it will ignore this Set OM Variable command"; **col. 15, lines 35 - 39**];

and a configuring unit configured to perform a configuration thereof in accordance with the transmitted configuration information in a case where determined that the transmitted model information and the previously stored model information coincide each other

[Fig. 7 illustrates the "Set OM Variable" printer procedure. After the second device (i.e., a selected printer) receives the packet sent from the host computer, the printer controller's Options Manager reads the value of the OM variable (from the data packet) and stores it into memory; col. 16, lines 32 – 35.

"Configuring the second device" is achieved by storing the new OM variable values into memory].

However, GOFFINET *does not specifically teach*

a transmitting unit configured to automatically transmit one or more data packets, the data packets containing the stored configuration information of the first device together with the correlated model information to a second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on,

GOFFINET teaches that once the model, identification and configuration information are acquired from the first device and are stored in a file (Fig. 4 step 112), "the file on the hard drive can be accessed and its contents sent to other printers on the LAN 15, thereby configuring such other printers very quickly and easily"; col. 15, lines 3 – 6.

GOFFINET teaches that one or more printers, which are to be configured by the "Quick Setup Send" procedure, are selected; **col. 15, lines 3 – 4.**

GOFFINET further teaches that the configuration information of a first device is sent to the second device in one or more packets. With reference to **Fig. 6**, "function block 150 ... builds a packet and transmits that packet as a Set OM Variable command to the selected printer"; **col. 15, lines 24 – 26.**

However, GOFFINET does not teach automatically transmitting one or more data packets that contain the stored configuration information of the first device together with the correlated model information to a second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and is turned on.

HANSEN teaches a method of automatically configuring a printing device. With reference to **Figs. 1 and 4**, HANSEN illustrates the automatic configuration of printing device **102** in which "the configuration process can be initiated by the printing device configuration module 316 of a computing device 108"; **page 3, paragraph 32, lines 3 – 6**. Although, the "printing device configuration module" **316** can be manually activated by "identifying the presence of a newly added printing device 102" [**page 3, paragraph 32, lines 8 - 11**], *in a manner similar as taught by GOFFINET*, HANSEN teaches that *the presence of a new printing device 102 "can be automatically detected by the printing*

device configuration module 316" [page 3, paragraph 33, lines 1 – 3] by periodically sending "response requests" to every device that is connected to module 316 [page 3, paragraph 33, lines 4 - 6]. *Alternatively, the "newly added printing device 102 can be configured to send out periodic notifications that identify its presence to other devices on the network 114, including the computing device 108"; page 3, paragraph 33, lines 11 – 15.*

That is, HANSEN teaches a method by which a newly added printing device (i.e., a "second device") automatically identifies its presence to the "printing device configuration module" 316 of a "computing device" 108 (i.e., an "information processing apparatus") *when the newly added device is connected to the information processing apparatus and is turned on.*

In response to this automatic identification, with reference to Fig. 4, HANSEN teaches that the "configuration module 316 can automatically determine what type of device the printing device 102 is, as indicated in block 404. In terms of type, the module 316 can, for instance, determine whether the device is a printing device, the manufacturer of the printing device, the device model number, etc"; page 3, paragraph 34, lines 4 – 9.

"Alternatively, the information can be obtained by querying the printing device 102 and receiving an appropriate response"; page 3, paragraph 34, lines 12 – 14.

HANSEN teaches that once the "printing device configuration module" **316** has acquired information relating to the type of device (e.g., manufacturer, device model number, etc.), module **316** "can determine what configuration applet 318 is to be downloaded to the printing device 102"; **page 3, paragraph 35, lines 1 – 3.**

That is, HANSEN teaches automatically transmitting one or more data packets that are used to configure a second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and is turned on.

As noted, GOFFINET teaches transmitting one or more data packets that contain the *stored configuration information* of the first device to the second device by *selecting one or more printers.*

HANSEN teaches an *alternative method of automatically selecting a printer* by detecting its presence when it is connected to the "computing device" **108** (i.e., the "information processing apparatus").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of HANSEN with those of GOFFINET and configure the second device by automatically transmitting the *stored configuration information* of the first device to the second device in response to the second device

reaching a state in which the second device is both connected to the information processing apparatus and is turned on.

The benefits of such automatic configuration would include both a reduction in configuration time and the elimination of potential errors that could be incurred by manually configuring a second device.

As for claim 7, GOFFINET teaches a device configuring system comprising an information processing apparatus for configuring a plurality of devices of various kinds that are connected thereto via a communication network, and a second device [e.g., printer 16a shown in Fig. 1], the information processing apparatus comprising:

a first acquiring unit configured to acquire from a first device [Fig. 1 printer 13] both model information of the first device and identification information specific to the first device

[GOFFINET teaches a method by which a host computer (Fig. 1 host computer 12) may "save the configuration information of a particular printer (e.g., printer 13)"; **col. 6, lines 47 - 48**. This is illustrated in **Fig. 4** as the "Quick Setup Save" procedure.

Within the printer controller (**Fig. 3**), the "Options Manager 37 is designed to be able to easily retrieve and store all such configuration variables for its particular model laser printer"; **col. 7, lines 5 – 7**.

Shown in **Fig. 4**, steps **102** (Determine I.D. of Next OM Variable to be Read) through **110** (At End of OM Table?), the Options Manager reads each OM variable shown in **Table #1** and transmits the corresponding value to the host computer where it is stored in a file.

From **Table #1**, the host computer acquires "model information" of a first device (e.g., OMMODELNAME, the model name) and "identification information" (e.g., OMSERIALNUM, the serial number);

other related "model information" could be obtained from Table #1 as well; for example, some "higher-end" models may have 3 paper input trays whereas, some "lower-end" models may just have one];

a configuration information acquiring unit configured to acquire from the first device configuration information of the first device

[Contained within **Table #1** are various configuration variables (i.e., "OM variables"); among these are, for example, **OMEMULATION** (default emulation), **OMPAPERSRC** (default paper source), **OMOUTPUTCAP** (output drawer capacity), and **OMINPUTCAP** (input tray1 capacity)];

a storing unit configured to store the acquired configuration information in a status correlated with both the model information and the identification information of the first device

[Fig. 4 “depicts a flow chart of the steps that the host computer (e.g., a host 12) must undergo to create a file at its own storage media (e.g., upon its own hard disk drive) so as to save the configuration information of a particular printer”; col. 6, lines 44 – 47; the storing of the acquired configuration information occurs in Fig. 4 step 112 (close file in which printer settings are stored)];

a second acquiring unit configured to acquire one or more data packets from a the second device, the one or more data packets containing both model information of the second device and identification information specific to the second device;

a determining unit configured to determine, in automatic response to the acquiring from the second device, whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

and a transmitting unit configured to transmit, when determined that the model information of the first device and the model information of the

second device coincide with each other, the stored configuration information of the first device to the second device

[GOFFINET teaches that “under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the “first device”] be utilized on other printers [i.e., the “second device”] having the identical model number”; **col. 15, lines 6 – 9.**

Fig. 6 illustrates the “Quick Setup Send” host computer procedure. Once a configuration setup file has been selected (**step 140**), a selection is made as to which printers will be configured (**step 142**). **Steps 144** through **152** retrieve configuration values stored in the saved setup file and transmit each value (along with its corresponding variable identification) to a second device (i.e., a selected printer); specifically, the data packet for a “Set OM Variable” command has a format shown in **col. 15, line 29**],

and the second device comprising:

a transmitting unit configured to automatically transmit the model information of the second device and identification information specific to the second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on.

However, GOFFINET *does not specifically teach*

a second acquiring unit configured to acquire one or more data packets from a the second device, the one or more data packets containing both model information of the second device and identification information specific to the second device;

a determining unit configured to determine, in automatic response to the acquiring from the second device, whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

and the second device comprising:

a transmitting unit configured to automatically transmit the model information of the second device and identification information specific to the second device in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on.

GOFFINET teaches that once the model, identification and configuration information are acquired from the first device and are stored in a file (**Fig. 4 step 112**), "the file on the hard drive can be accessed and its contents sent to other printers on the LAN 15, thereby configuring such other printers very quickly and easily"; **col. 15, lines 3 – 6.**

As noted, GOFFINET teaches that “under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the “first device”] be utilized on other printers [i.e., the “second device”] having the identical model number”; **col. 15, lines 6 – 9.**

GOFFINET teaches that a host computer can acquire both model information (e.g., OMMODELNAME) and identification information (e.g., OMSERIALNUM) by requesting a device to return the value associated with an “OM variable”.

GOFFINET further teaches that such information is communicated to the host computer in one or more packets. With reference to **Fig. 5**, GOFFINET cites, “Once the variable value has been determined, function block 130 will *build a packet that is to be transmitted back to the host 12*”; **col. 13, lines 65 – 67.**

That is, it would have been obvious to one of ordinary skill in the art at the time the invention was made to acquire both *model information* and *identification information* from a “second device” [e.g., printer **16a** shown in **Fig. 1**] in the same manner (using OM variables) as with the “first device” (i.e., printer **13**).

However, GOFFINET does not teach automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both

model and identification information when the second device is connected to the information processing apparatus and is turned on.

HANSEN teaches a method of automatically configuring a printing device. With reference to **Figs. 1 and 4**, HANSEN illustrates the automatic configuration of printing device **102** in which "the configuration process can be initiated by the printing device configuration module 316 of a computing device 108"; **page 3, paragraph 32, lines 3 – 6**. Although, the "printing device configuration module" **316** can be manually activated by "identifying the presence of a newly added printing device 102" [**page 3, paragraph 32, lines 8 - 11**], *in a manner similar as taught by GOFFINET*, HANSEN teaches that *the presence of a new printing device 102 "can be automatically detected by the printing device configuration module 316"* [**page 3, paragraph 33, lines 1 – 3**] by periodically sending "response requests" to every device that is connected to module **316** [**page 3, paragraph 33, lines 4 - 6**]. *Alternatively, the "newly added printing device 102 can be configured to send out periodic notifications that identify its presence to other devices on the network 114, including the computing device 108"*; **page 3, paragraph 33, lines 11 – 15**.

That is, HANSEN teaches a method by which a newly added printing device (i.e., a "second device") automatically identifies its presence to the "printing device configuration module" **316** of a "computing device" **108** (i.e., an "information processing

apparatus") *when the newly added device is connected to the information processing apparatus and is turned on.*

In response to this automatic identification, with reference to Fig. 4, HANSEN teaches that the "configuration module 316 can automatically determine what type of device the printing device 102 is, as indicated in block 404. In terms of type, the module 316 can, for instance, determine whether the device is a printing device, the manufacturer of the printing device, the device model number, etc"; page 3, paragraph 34, lines 4 – 9. "Alternatively, the information can be obtained by querying the printing device 102 and receiving an appropriate response"; page 3, paragraph 34, lines 12 – 14.

That is, HANSEN teaches automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information when the second device is connected to the information processing apparatus and is turned on.

In addition, GOFFINET does not teach automatically causing a determination by either the information processing apparatus or the second device of whether the model information of the first device coincides with the model information of the second device.

HANSEN teaches that once the "printing device configuration module" 316 has acquired information relating to the type of device (e.g., manufacturer, device model number,

etc.), module **316** "can determine what configuration applet 318 is to be downloaded to the printing device 102"; **page 3, paragraph 35, lines 1 – 3.**

That is, HANSEN teaches automatically causing a determination by the information processing apparatus of whether the model information of the second device coincides with the model information of a known, recognized device. HANSEN teaches that "the type of applet 318 downloaded to the printing device 102 may be device dependent where the nature of the configuration of the device depends upon the device's architecture"; **page 3, paragraph 35, lines 9 – 12.**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of HANSEN with those of GOFFINET so that the information processing apparatus could automatically configure the second device by *automatically detecting the presence* of the newly added second device, *automatically querying* the newly added second device for both model and identification information and *automatically determining* whether the newly added second device matched a known, recognized device (e.g., the first device).

The benefits of such automatic configuration would include both a reduction in configuration time and the elimination of potential errors that could be incurred by manually configuring a second device.

As for claim 8, GOFFINET teaches a computer readable medium storing a program causing a computer system to execute a process for configuring a plurality of devices of various kinds that are connected thereto via a communication network, the process comprising:

acquiring, from a first device [Fig. 1 printer 13], model information of the first device, identification information specific to the first device

[GOFFINET teaches a method by which a host computer (Fig. 1 host computer 12) may "save the configuration information of a particular printer (e.g., printer 13)"; col. 6, lines 47 - 48. This is illustrated in Fig. 4 as the "Quick Setup Save" procedure.

Within the printer controller (Fig. 3), the "Options Manager 37 is designed to be able to easily retrieve and store all such configuration variables for its particular model laser printer"; col. 7, lines 5 – 7.

Shown in Fig. 4, steps 102 (Determine I.D. of Next OM Variable to be Read) through 110 (At End of OM Table?), the Options Manager reads each OM variable shown in Table #1 and transmits the corresponding value to the host computer where it is stored in a file.

From **Table #1**, the host computer acquires "model information" of a first device (e.g., **OMMODELNAME**, the model name) and "identification information" (e.g., **OMSERIALNUM**, the serial number);

other related "model information" could be obtained from Table #1 as well; for example, some "higher-end" models may have 3 paper input trays whereas, some "lower-end" models may just have one],

and configuration information of the first device

[Contained within **Table #1** are various configuration variables (i.e., "OM variables"); among these are, for example, **OMEMULATION** (default emulation), **OMPAPERSRC** (default paper source), **OMOUTPUTCAP** (output drawer capacity), and **OMINPUTCAP** (input tray1 capacity);

storing the acquired configuration information in a status correlated with both the model information and the identification information of the first device

[**Fig. 4** "depicts a flow chart of the steps that the host computer (e.g., a host 12) must undergo to create a file at its own storage media (e.g., upon its own hard disk drive) so as to save the configuration information of a particular printer"; **col. 6, lines 44 – 47**; the storing of the acquired configuration information occurs in **Fig. 4** step 112 (close file in which printer settings are stored)];

acquiring one or more data packets from a second device, the one or more data packets containing both model information of the second device and identification information specific to the second device,

the acquiring from the second device occurring automatically in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on;

automatically causing, in response to the acquiring from the second device, the information processing apparatus or the second device to determine whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

and transmitting, when determined that the model information of the first device and the model information of the second device coincide with each other, the stored configuration information of the first device to the second device

[GOFFINET teaches that "under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the "first device"] be

utilized on other printers [i.e., the “second device”] having the identical model number”; **col. 15, lines 6 – 9.**

Fig. 6 illustrates the “Quick Setup Send” host computer procedure. Once a configuration setup file has been selected (**step 140**), a selection is made as to which printers will be configured (**step 142**). **Steps 144** through **152** retrieve configuration values stored in the saved setup file and transmit each value (along with its corresponding variable identification) to a second device (i.e., a selected printer); specifically, the data packet for a “Set OM Variable” command has a format shown in **col. 15, line 29**].

However, GOFFINET *does not specifically teach*

acquiring one or more data packets from a second device, the one or more data packets containing both model information of the second device and identification information specific to the second device,

the acquiring from the second device occurring automatically in response to the second device reaching a state in which the second device is both connected to the information processing apparatus and turned on;

automatically causing, in response to the acquiring from the second device, the information processing apparatus or the second device to

determine whether or not the model information of the first device and the model information of the second device in the one or more data packets coincide with each other;

GOFFINET teaches that once the model, identification and configuration information are acquired from the first device and are stored in a file (**Fig. 4 step 112**), "the file on the hard drive can be accessed and its contents sent to other printers on the LAN 15, thereby configuring such other printers very quickly and easily"; **col. 15, lines 3 – 6.**

As noted, GOFFINET teaches that "under normal circumstances, it is preferred that such setup or configuration information for a particular printer [i.e., the "first device"] be utilized on other printers [i.e., the "second device"] having the identical model number"; **col. 15, lines 6 – 9.**

GOFFINET teaches that a host computer can acquire both model information (e.g., OMMODELNAME) and identification information (e.g., OMSERIALNUM) by requesting a device to return the value associated with an "OM variable".

GOFFINET further teaches that such information is communicated to the host computer in one or more packets. With reference to **Fig. 5**, GOFFINET cites, "Once the variable value has been determined, function block 130 will *build a packet that is to be transmitted back to the host 12*"; **col. 13, lines 65 – 67.**

That is, it would have been obvious to one of ordinary skill in the art at the time the invention was made to acquire both *model information* and *identification information* from a "second device" [e.g., printer **16a** shown in **Fig. 1**] in the same manner (using OM variables) as with the "first device" (i.e., printer **13**).

However, GOFFINET does not teach automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information *when the second device is connected to the information processing apparatus and is turned on.*

HANSEN teaches a method of automatically configuring a printing device. With reference to **Figs. 1 and 4**, HANSEN illustrates the automatic configuration of printing device **102** in which "the configuration process can be initiated by the printing device configuration module 316 of a computing device 108"; **page 3, paragraph 32, lines 3 – 6**. Although, the "printing device configuration module" **316** can be manually activated by "identifying the presence of a newly added printing device 102" [**page 3, paragraph 32, lines 8 - 11**], *in a manner similar as taught by GOFFINET*, HANSEN teaches that *the presence of a new printing device 102 "can be automatically detected* by the printing device configuration module 316" [**page 3, paragraph 33, lines 1 – 3**] by periodically sending "response requests" to every device that is connected to module **316** [**page 3, paragraph 33, lines 4 - 6**]. *Alternatively, the "newly added printing device 102 can be*

configured to send out periodic notifications that identify its presence to other devices on the network 114, including the computing device 108"; page 3, paragraph 33, lines 11 – 15.

That is, HANSEN teaches a method by which a newly added printing device (i.e., a "second device") automatically identifies its presence to the "printing device configuration module" 316 of a "computing device" 108 (i.e., an "information processing apparatus") *when the newly added device is connected to the information processing apparatus and is turned on.*

In response to this automatic identification, with reference to Fig. 4, HANSEN teaches that the "configuration module 316 can automatically determine what type of device the printing device 102 is, as indicated in block 404. In terms of type, the module 316 can, for instance, determine whether the device is a printing device, the manufacturer of the printing device, the device model number, etc"; page 3, paragraph 34, lines 4 – 9.

"Alternatively, the information can be obtained by querying the printing device 102 and receiving an appropriate response"; page 3, paragraph 34, lines 12 – 14.

That is, HANSEN teaches automatically acquiring from the second device by the information processing apparatus one or more data packets which contain both model and identification information when the second device is connected to the information processing apparatus and is turned on.

In addition, GOFFINET does not teach automatically causing a determination by either the information processing apparatus or the second device of whether the model information of the first device coincides with the model information of the second device.

HANSEN teaches that once the "printing device configuration module" **316** has acquired information relating to the type of device (e.g., manufacturer, device model number, etc.), module **316** "can determine what configuration applet 318 is to be downloaded to the printing device 102"; **page 3, paragraph 35, lines 1 – 3.**

That is, HANSEN teaches automatically causing a determination by the information processing apparatus of whether the model information of the second device coincides with the model information of a known, recognized device. HANSEN teaches that "the type of applet 318 downloaded to the printing device 102 may be device dependent where the nature of the configuration of the device depends upon the device's architecture"; **page 3, paragraph 35, lines 9 – 12.**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of HANSEN with those of GOFFINET so that the information processing apparatus could automatically configure the second device by *automatically detecting the presence* of the newly added second device, *automatically querying* the newly added second device for both model and identification information

and *automatically determining* whether the newly added second device matched a known, recognized device (e.g., the first device).

The benefits of such automatic configuration would include both a reduction in configuration time and the elimination of potential errors that could be incurred by manually configuring a second device.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **GOFFINET [US Patent 5,905,906]** in view of **HANSEN [US Patent Application 2003/0090704 A1]** and **TATEYAMA [US Patent 6,425,019 B1]**.

Regarding claim 5, neither GOFFINET nor HANSEN specifically teach the device configuring system as claimed in claim 2,

wherein the identification comprises an MAC address of the device.

TATEYAMA teaches a data communications method among various types of devices which may include computers, printers, and storage devices; **col. 5, lines 62 – col. 6, line 3**. TATEYAMA further teaches the identifier (ID) unique to each device “may be a network address such as an Internet Protocol (IP) address or a Media Access Control (MAC) address”; **col. 22, lines 40 – 42**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of TATEYAMA with those of GOFFINET and

HANSEN to use a network device's MAC address as identification since network devices are assigned *unique* and specific MAC addresses at the time of manufacture.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter L. Cheng whose telephone number is 571-270-3007. The examiner can normally be reached on MONDAY - FRIDAY, 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

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